

in the northeastern section of the subunit. This area is designated as an intensive recreation use node.

b. Site Plan. The Division of Parks and Outdoor Recreation will prepare a detailed site plan of this node and of the Fishhook Trail in coordination with private sector groups. With careful planning, a variety of uses can occur in this area and conflicts between user groups can be minimized.

c. Location of Gold Panning Businesses. Use of [THE] a mining claim for a tourism business must be authorized by permit or surface lease from the Division of Land and Water Management. [ONE] If a gold panning business is [will be] authorized on the east side of the pass outside the alpine ski resort lease, it should be located adjacent to the Little Susitna River between Fishhook Creek and the junction of the Hatcher Pass Road and Gold Mint Road on state land where the operation can be screened from view of the Hatcher Pass Road corridor. An exception to the screening requirement may be a location adjacent to facilities on private land if it does not create visual clutter and provides the opportunity for clustering commercial recreation facilities. See Chapter Three, commercial recreation guidelines for more details.

4. **ALPINE SKI AREA/FOUR-SEASON RESORT**

a. Economic and Physical Feasibility Studies. The Department of Natural Resources will cooperate with the Mat-Su Borough on economic and physical feasibility studies.

b. Preserving Option for Development. No actions will be taken which preclude the development of a downhill ski area/four-season resort in this unit and the area will be closed to mineral entry for at least ten years.

c. Snow Data. The Department of Natural Resources should continue to collect snow data for at least five years.

[c]**d. Solicitation.** Within one year of the approval of this plan, the Department of Natural Resources will solicit applications for the development of a downhill ski area.

[d]**e. Criteria for Applications.** Prior to soliciting applications, the Department of Natural Resources will develop criteria that the applications must meet. The criteria will include but not necessarily be limited to:

- provides a high quality recreational opportunity
- architectural standards and compliance with viewshed and other plan guidelines
- adequate transportation
- safety

[* **SCALE:** OVERALL COMPACT DEVELOPMENT THAT DOES NOT VISUALLY OVERWHELM THE AREA; IT COULD INCLUDE OVERNIGHT ACCOMMODATIONS, RESTAURANT, BAR, AND SKI RENTAL SHOP, BUT WILL NOT INCLUDE PRIVATE

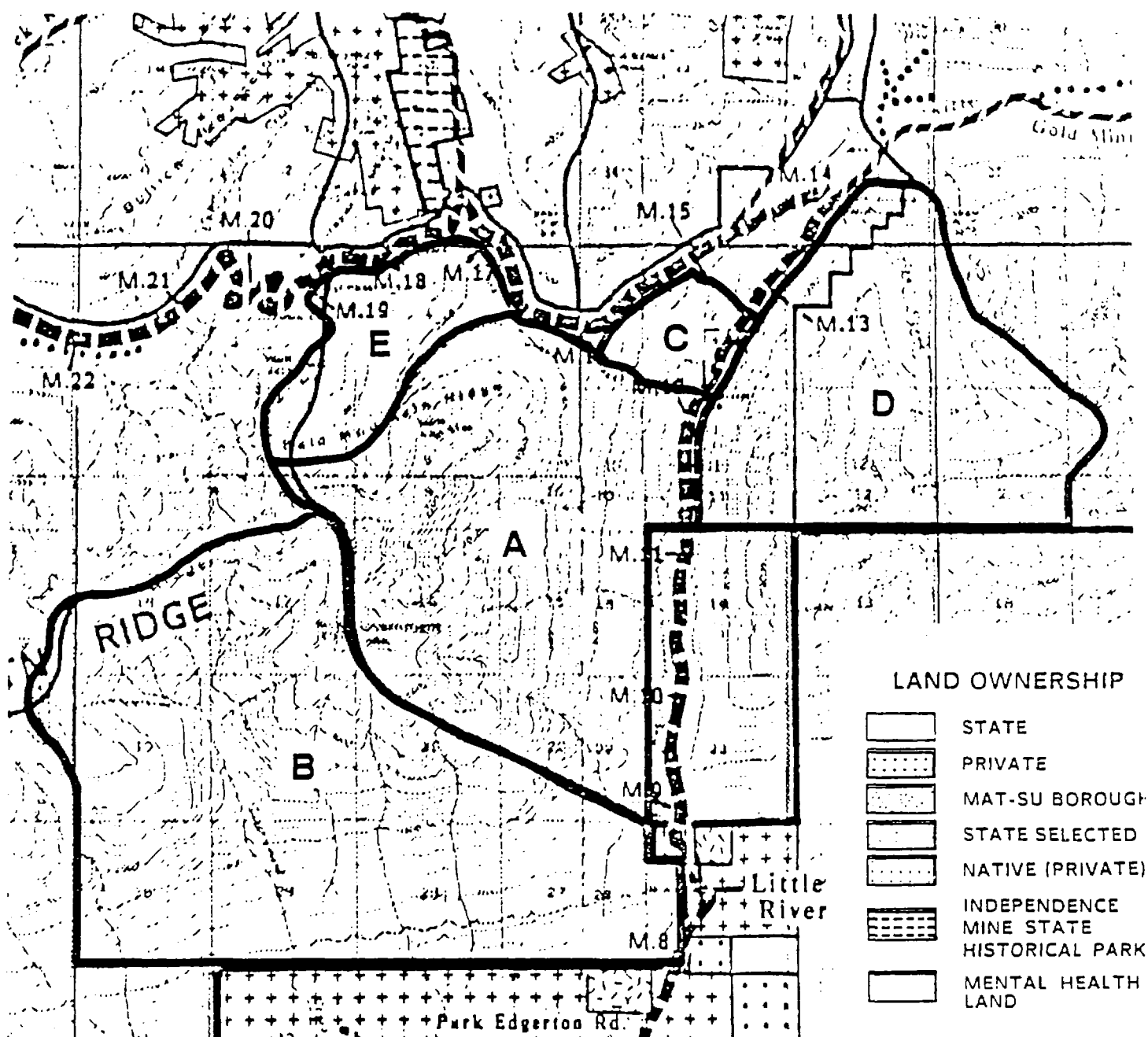
LEASES OR SUBLEASES TO INDIVIDUALS FOR CABINS; IT COULD INCLUDE CONDOMINIUMS IF THEY CAN BE DESIGNED TO MEET THIS CRITERIA.]

- financial capability; proof of financial capability to plan, design, construct, and operate a ski resort is required as appropriate.

- ski area, four-season resort planning, design and management experience is required (four-season resort experience is required only if a four-season resort is proposed).

f. Boundary of resort area. Resort development may occur only south and west of the Hatcher Pass Road.

- West of the road, there should be no resort facility development below the low bench. The intent is that the resort development be above the road and generally out of view of the road at least south of Fishhook Creek rather than in the road corridor in order to retain the natural, scenic quality of the drive and to leave opportunities for siting such public facilities as a campground, scenic pulloffs, salmon viewing area, etc.



- Resort development should generally be south of the main stem of Fishhook Creek (where Fishhook Creek flows through section 3) except for areas included in the existing resort lease or as necessary to allow a ski run in the Fishhook valley. However, an area north of Fishhook Creek within T19N, R1E Section 2 and the southeast corner of section 3 (area c on amendment map 3), may be considered for base facility development in conjunction with primary ski area development on Government Peak and the east end of Bald Mountain Ridge contingent on site suitability analysis and justification of its functional relationship to the overall downhill ski resort. If such development is allowed, the activities that take place in the area now (skiing, snowmachining, and sledding) must be protected or enhanced.

- The area north of Bald Mountain Ridge (in the vicinity of the "\$1000 Run") should be managed as a telemark area and to maintain the scenic view from the road. Ski lifts and private commercial recreation uses will not be allowed. (Area E, Map 3 in this document.)

- Resort development in Subunit B is allowed only in conjunction with development of an alpine ski resort in Subunit A. In the event that portions of the resort lease that were originally part of the Hillside Subunit are dropped from the lease, the Division of Land and Water Management would consider modifying the boundaries of management units to transfer the relinquished areas to the Hillside Subunit.

[e]g. Environmental Assessment. Before a final decision is made, an assessment must be made of the environmental impacts of the proposed development. The scope and detail required will be in proportion to the size of the development proposed. The intent is not to preclude consideration of an application from a local ski club or small operator.

During the environmental assessment for the potential alpine ski area development, DNR and/or the prospective developer, in consultation with ADF&G, will analyze impacts to wildlife and recommend measures to be taken to mitigate any significant loss of important wildlife habitat.

[f]h. Public Hearings. Information on the proposed development and its impacts will be made available to the public, and public hearings will be held in the Matanuska Valley and Anchorage before a final decision is made on the scale and specifics of the development.

[g]i. Agency Involvement. The Division of Parks and Outdoor Recreation and the Department of Fish and Game will be actively involved in the decision-making process.

j. Resort Design guidelines.

(1) Cluster design. Resort facilities should be grouped closely together to facilitate foot access and leave as much of the area in natural open space as possible.

(2) Open space. Open space areas should generally be left in natural condition and should not be modified in order to provide a natural, tranquil setting for the resort and habitat for wildlife. However, a pedestrian trail system is an acceptable use and other related uses may be considered if they meet this intent. (This guideline is not intended to preclude subsequent use of open space for a facility if it meets other guidelines of this plan and is approved by DNR.)

(3) Greenbelts. See fish and wildlife section.

(4) Castle Mountain Fault. Structures designed for human occupancy may not be located within ¼ mile of the location of the Castle Mountain fault zone as shown on Figures 2 and 3 of DGG\$ Public Data File 88-39 unless a geologist/geo-technical engineer experienced in fault studies locates the fault planes by conducting detailed surficial mapping and trenching surveys across the fault zone. In that case residential structures must be located a minimum of 50 feet from the fault planes.

(5) Functional relationships. Group together activities that are functionally similar or that have similar circulation, access, and service requirements. In grouping activities, consider the following:

(a) Noise generating and active activities should not be placed adjacent to uses requiring more quiet, passive conditions.

(b) Activities requiring controlled access or privacy should be functionally and physically separated from other activity use areas and facilities. For example, areas developed for resort housing should be located to afford access to recreational facilities, but with reduced general public access to maintain privacy of the housing area.

(6) Resort design and building relationships. A goal of resort design is to provide a unique or distinct atmosphere, and to allow visitors the possibility of forming an identity with their surroundings.

(a) The overall objective in locating roads and grouping buildings is to define an integrated, cohesive village so that views of the resort from the mountain and off-site locations present a well-organized village that blends with its natural surroundings.

(b) Locate buildings and walkways so that buildings shelter walkways from inclement weather.

(c) Building design.

(i) Orient buildings so that they have as much southern (solar) exposure as possible.

(ii) To the extent feasible, avoid the use of outdoor steps in the base facility unless they can be designed to be ice free and alternate handicap access is provided.

(iii) [h. ARCHITECTURE.] The architectural style of developments will complement the natural features or historic mining character of the area. Parking and access will be designed to blend with the landscape (see commercial recreation guidelines, Chapter Three, pages 133-135).

(d) The developer should provide the rationale for resort design and location decisions when submitting plans for approval. This rationale should be based on functional relationships and a site suitability analysis. The site suitability analysis should address such items as soils, slope, vegetation, wildlife, noise, and visual factors.

(7) Mountain Design

(a) Ski-related facilities should be located so that they take full advantage of natural site contours with a minimum amount of cut and fill.

(b) Locate and design ski runs and base facilities to allow for ski access from and to the ski slopes and related base facilities. Provide for efficient, convenient circulation in and around base facilities for both skiers and other resort visitors.

(c) The developer should provide the rationale for his mountain design when he submits plans for approval. This should be based on an analysis of snow and wind conditions, ski terrain suitable for beginning, intermediate, advanced and expert skiers, and justification of the base facilities in terms of need to support the mountain development.

(8) Pedestrian circulation. The resort design should include enough provision for pedestrian circulation so that there is minimal need for the use of a car or other mechanized transportation. Pedestrian access routes and trails should be designated and physically separated from roadways.

(9) Internal access and service roads. Locate, design, and construct access and service roads so as to minimize terrain modification and visibility from within and without the management unit.

(a) To the extent possible, avoid placing roads and service trails on alpine slopes, or slopes with low-growing native plant cover that are visible from the Hatcher Pass Road, Independence Mine, and other popular use areas. Where this is not possible, an analysis of alternative routes should be conducted to locate the proposed roads and trails where they will be least visible.

(b) To the extent possible, locate roads and trails to avoid areas of excessively steep slopes, unstable soils, and steeply-sloping side gullies. For roads and trails that must be located on hazardous or unstable terrain, the developer will conduct an analysis of alternatives and technical feasibility.

(c) Design internal road and trail system to allow for optimum use of suitable ski slopes. To the extent possible, avoid switchbacks on service roads because they disrupt skiing patterns and may not meet design criteria for snow making and slope grooming equipment.

(d) The design of the internal road system should include shoulders, drainage structures, trail head, vehicle pullouts, and terrain stabilization and restoration plans.

(e) The design of service roads should include drainage structures, erosion control, terrain stabilization, and restoration plans; and shoulders, trailheads, and vehicle pullouts as appropriate.

(f) Mass transit should be provided within the resort. All modes of internal mass transit should be considered including an aerial transportation system (e.g. tramway, gondola), to minimize the need for road construction and use of automobiles within the ski site. Further, the developer should evaluate alternatives including the use of mass transit, for reducing private automobile traffic to the resort in order to minimize the impact of increased resort traffic on the regional road system. The developer, in consultation with affected state agencies and the Matanuska-Susitna Borough, should implement appropriate measures to reduce resort-generated traffic on the local road system.

(10) Parking. When designing parking lots to serve resort facilities, the developer should consider efficient traffic patterns, minimize conflicts between vehicles and pedestrians, provide adequate visitor drop-off, handicap access, and provide adequate visitor information.

k. Type of development allowed.

(1) Subunit A and B: The type of development that is allowed in Subunits A and B includes those types of facilities and associated development normally found in an alpine ski resort that is also a four-season destination resort. This includes, but is not limited to, ski lifts, day lodge, hotel, resort housing, conference center, a summit restaurant; other recreational facilities such as tennis courts, spa and therapy facility, and a gymnasium; other facilities necessary to support users of the resort such as shops, museum or theatre; and a helipad for use in emergencies, construction, and maintenance. An airport and motocross are not allowed within the four-season resort lease.

(2) Subunit B: Resort development in Subunit B is allowed only in conjunction with development of an alpine ski resort in Subunit A. The type of additional development that is allowed in Subunit B includes those types of facilities normally associated with a four-season resort. This includes, but is not limited to, recreational facilities such as a golf course; horseback riding facilities and associated trail system; trail system in a natural setting for a variety of non-motorized uses such as cross-country skiing, dog mushing, and hiking; field archery; outdoor shooting activities; a camping area; and a heliport that may be used for other operations in addition to those specified above.

(3) Criteria for evaluating proposed recreational and support uses: Criteria for evaluating proposed recreational and support uses which may be proposed by the developer are given below. The goal is to allow development of an economically viable ski area/four-season destination resort while maintaining a high quality natural environment and providing a satisfying recreational experience for the user. These guidelines are criteria for evaluation of the effects of proposed uses on the natural system's ability to absorb development. There is a critical threshold beyond which continuation of development can degrade the natural setting and the quality of the experience. Because determination of the limit of capacity of a system and the appropriateness of proposed uses is ultimately a subjective one, a review process will be established which includes a variety of agency and technical expertise and involvement of a citizens advisory committee.

(a) Physical Capacity. Some primary factors to consider are the amount of space necessary for the proper conduct of the activity, the hardness or vulnerability of the vegetation, and the erodibility and other characteristics of the soil. Proposed uses should not create a problem of overuse to the extent that the site is impacted beyond its ability to restore itself by natural means. A site suitability analysis is a key requirement for physical capacity determination.

(b) Balance of Open Space. Consider the effect of the proposed use on the balance of open space to developed area. The value of developed areas both within the lease site and on adjacent private lands is enhanced by maintenance of a high-quality natural setting on public lands.

(c) Social Capacity. Consider the satisfaction of the participant when evaluating the proposed use. Evaluate such factors as:

- crowding (e.g., will visitors have to "wait too long" to use the activity?)
- compatibility of activity in relation to other activities
- noise generated by the activity and its effect on other uses and on enjoyment of adjoining private land
- environmental affects of the activity such as dust, erosion, or vehicle emissions
- whether Alaska weather conditions allow the proposed activity to be carried out satisfactorily

- attractiveness of the facility
- appropriateness of the activity (is it one resort users would generally enjoy?)
- size and configuration of the site (are they appropriate for the proposed use?)
- location (is it appropriate for the proposed use?)

(d) Effect on Fish and Wildlife. Evaluate the effect of the proposed activity on the ability of fish and wildlife to continue to use the site and adjoining areas.

(e) Effect on Scenic Values. Evaluate the proposed use in relation to important scenic viewsheds from other public use areas. Will the use cause unnecessary harm to the visual qualities of the area? Has the best location been identified for the proposed use?

(f) Public Safety. Evaluate the safety of the proposed use in relation to avalanche and other natural hazards and in relation to other activities.

(g) Appropriate Use of State Lands. Evaluate the proposed use by considering the following questions: Is this a typical resort activity? Is this an appropriate activity to occur on these public lands? Is there demand? If the answers to either of the first two questions may be no, the developer should consider alternative sites, both private and public, for the proposed use. In cases where a viable off-site alternative exists, the developer should justify why the inclusion of the proposed use on site is necessary to the resort development. Before approving the inclusion of such a use on site, DNR should consider the effect on the local economy of locating the proposed use on-site or off-site.

(h) Cumulative Impact of Proposed Use. Evaluate the cumulative effect of the proposed use on open space, wildlife habitat, and environmental quality in relation to other developments within the lease site and adjacent areas.

(4.) Review Process for Ski Area/Four-Season Proposed Uses

The review team for ski area/four-season resort development will include Division of Land & Water Management, as the lead agency with lease administration responsibility, in consultation with Division of Parks & Outdoor Recreation as well as other affected resource agencies within DNR; Department of Fish and Game; Department of Commerce and Economic Development's Division of Tourism; Department of Environmental Conservation; and the Matanuska-Susitna Borough. Technical expertise will be included from DNR divisions such as the Division of Geological & Geophysical Surveys, the Plant Materials Center, and Division of Parks & Outdoor Recreation's Design & Construction section. In addition, depending on funding availability, DLWM will contract with private sector consultants with expertise in ski area and four-

season resort development, engineering and other appropriate specialized areas as necessary to serve as technical advisors. When appropriate, federal agencies such as the U.S. Soil Conservation Service and the U.S. Forest Service should also be consulted on an advisory basis. In addition, a citizens advisory committee made up of representatives of the most affected user groups, both in the Matanuska Valley and in Anchorage, will be part of the review process on an advisory basis.

DNR will utilize the review team at the following stages of the development process:

- (a) Review of pre-qualification, solicitation, or other bidding documents.
- (b) Concept Development Plan
- (c) Master Development Plan (MDP) and amendments to the MDP.

Public meetings will be held to provide the general public an opportunity to review and comment on the Concept Development Plan. The public will also be provided an opportunity to comment on major amendments to the Master Development Plan.

I. Resort housing development.

(1) Resort housing may be constructed on up to 150 acres, including garages, parking lots, common areas, roadways, and common facilities. Greenbelts and other open spaces that serve the entire resort will not be counted as part of the 150 acres.

(2) The average density of the resort housing will be eight units per acre.

(3) The number of acres or the density limitation may be reconsidered during the master development planning process if the developer can justify the increase based on such factors as market demand, functional relationships, environmental considerations, financial feasibility, and resort carrying capacity. DNR must consult with the planning team and provide the public with an opportunity to review any proposal to increase the acreage or density prior to a final decision to increase the limits. However, a change in acreage or density does not require an amendment to the plan.

(4) Resort housing should be concentrated in clusters.

(5) Resort housing should generally be common wall structures although a percentage may be detached units.

(6) Resort housing in Subunit A should be located to allow for ski-in/ski-out access to ski facilities. Resort housing may be located on slopes of up to 25 percent. (Resort housing is allowed on steeper slopes in Subunit A than Subunit B because Subunit A has only a few acres of less-than-15 percent slopes. For the ski resort to be successful, it is important that visitors be able

to stay close to the ski base. In order to allow and encourage the development of housing adjacent to the ski base facility, it is necessary to allow construction on steeper slopes.)

(7) Resort housing in Subunit B should not be located in the alpine zone (above the alder/willow line). The units should be clustered around a common open space, view, or recreational facility with pedestrian access to those facilities. In order to minimize environmental and visual impacts, the units should be located on slopes that are generally 15 percent or less unless location on a steeper slope is important to recreation design or to complete a cluster or focus (e.g. around the upper edge of the golf course).

(8) Resort housing may not be located within ¼ mile of the mapped location of the Castle Mountain fault zone (as shown on Figures 2 and 3 of DGGs Public Data File 88-39) unless a geologist or geo-technical engineer experienced in fault studies locates the fault planes by conducting detailed surficial mapping and trenching surveys across the fault zone. In that case, residential structures must be located a minimum of 50 feet from the fault planes.

(9) Resort housing may not be located within ¼ mile of Government Creek or the stream in the east ½ of Section 21 and the east ½ of Section 28, Township 19N, Range 1E, Seward Meridian. In addition, resort housing may not be located within the 1000-foot wide east-west greenbelt. See guideline 10 f, Fish and Wildlife, for the location of this greenbelt.

(i.)m. Management of the Ski Area. Prior to soliciting development proposals, DNR will evaluate the options available. It could be authorized under a lease from the Division of Land and Water Management or by concessionaire agreement with the Division of Parks and Outdoor Recreation. A third option would be to convey it to the Mat-Su Borough as part of their municipal selections and they in turn could convey development interests to the private sector.

n. Recreational Development Guidelines

(1) ORV Use. Vehicular travel is restricted to existing roads and trails. Permits are required for off road or off trail travel.

(2) Motorized Trail Use. Snowmachine trail development is limited to a connection from Subunit A base facilities to the Hatcher Pass snowmachine trail and snowmobile play area north of Fishhook Creek. Other motorized trail development is not allowed due to incompatibility with the tranquil resort setting, non-motorized activities and wildlife use of the area.

(3) Trail Development and Management. It is recommended that the developer include a variety of nonmotorized trails within the lease site to serve both resort guests and local residents. The developer should consult with DNR's Division of Parks & Outdoor Recreation and other knowledgeable local groups (e.g., Nordic Ski Association, Hatcher Pass Outdoor Club, Mat-Su Borough Trails

Committee) in trail planning and design. Access to the trail system should be convenient for local residents and tie in with other public trails where possible and be available to the general public. The developer may charge fees for public use of trails the developer maintains.

(a) Design Standards. Trail design should ensure safe, scenic, and enjoyable recreational experiences for a variety of winter and summer users. The developer should follow trail development standards in the Alaska State Trails Plan or other equivalent sources. The trail system should be located and designed to minimize impacts on wildlife.

(b) Route Selection. Trails should be located and designed to blend harmoniously with the natural topography and vegetation. The trail system should include both loop trails and some longer destination routes.

(c) Alpine Zones. To minimize damage to alpine vegetation, trails and lookouts in heavy use areas in the alpine zone should be planned for and appropriately hardened. Foot traffic should be directed to established trails.

(d) Trail Clearing. Large trees should be cut only where it is impractical to route the trail around them. A large tree is a tree with a minimum of a 12-to 15-inch diameter at breast height. However, this guideline will be implemented through site-specific judgments based on the quantity of large trees, quality and health of the tree, relative size of a tree compared to other trees in the area, whether saving a tree is feasible or practical based on route and gradient (e.g. on a steep slope), and other factors.

(e) Trail Maintenance. The developer should write a trail maintenance operations manual that addresses such items as public safety and other requirements of these guidelines and a quality recreational experience.

(f) Equestrian Trails. Equestrian trails should have appropriate surfacing so that horses can avoid mudholes and insecure footing and to minimize maintenance. Grades should be moderate, especially where winter use is anticipated. Trails will not be located in sensitive alpine terrain. Trails should generally avoid wet areas unless appropriate surfacing or bridging is provided. At least one trail should be designated as a year-round horse trail. Horse trails should be separated from other types of trail use. However, summer-only horse trails could be used for winter sled dog trails. Horse trails should avoid road crossings.

(g) Sled Dog Trails. This use should be separate from ski trails. Sled dog trails are recommended to serve both local users and to provide a uniquely Alaskan experience to visitors to the resort.

(h) Cross-Country Ski Trails. Development of an extensive cross-country ski trail system in Subunit B is highly recommended. Consider grooming for both track skiing and skate skiing. Loop trails are preferable in order to expose trail users to more viewing opportunities and enable a one-way traffic pattern which increases skier safety on hills. Cross country trails should undulate, providing opportunities for a mixture of flat, uphill and downhill. Avoid avalanche hazard areas. Summer hiking and bicycle trails make good ski trails if they provide long run-outs at the bottom of steep hills.

Consider including an open staging area for racing events. Construction of a 30 to 50 kilometer trail system should be considered because the resort could then serve as an international style touring center and site of international competitions. Consider including space for a nordic ski school and overnight, hostel-type facilities for skiers who are training.

(i) Hiking Trails. The developer should consider foot trails for a variety of uses such as hiking trails, wildlife viewing, nature trails, and running trails. Some trails should be designed to accommodate the specialized needs of handicapped people. The developer should consult with Division of Parks & Outdoor Recreation regarding standards for these trails.

(j) Bicycle Trails. The trail system should include trails for mountain bikes. The developer should consider including a bike path separated from the roadway if motor vehicle traffic on the roadways will be fairly extensive and it is feasible.

(k) Snowmachine Trail. The recommended snowmachine connector trail from the ski area in Subunit A to the north side of Fishhook Creek should not be shared by non-motorized users and should be built wide enough to safely accommodate this high speed activity (See Alaska Trail Plan standards).

(4) Camping Area. The goal is to provide an alternative means of overnight accommodation for resort visitors in an attractive setting. Other guidelines include:

(a) Location. The camping area shall be located as near to the resort entrance as possible in order to avoid camper traffic within the resort to the extent possible. Large recreational vehicles and added traffic would detract from the experiences of other visitors.

(b) Siting/Visual. The camping area will be located where there is sufficient vegetation to minimize visibility of camping units from other areas within the resort, from off site, and to provide opportunities for screening of sites within the camping area.

(c) Design. A balance of seclusion and opportunities to congregate with other people should be incorporated in the design. Tent camping sites should be separated by a vegetative buffer from each other and from motor vehicle camping. Tent camping sites should be lower density than motor vehicle sites. A general standard used by Alaska State Parks is 2 to 9 units per acre. Motor vehicle areas have higher densities, up to 17 per acre.

(d) Scale. A camping area may utilize up to 30 acres with a maximum of 100 to 150 sites. If the design justifies use of more acreage to minimize impacts or to provide more open space or grade separation within the site, a larger area could be considered.

(5) Outdoor Shooting. Outdoor shooting may be allowed as a resort activity subject to the following guidelines on public safety and optimum location. It is the intent that this use will be located and designed so that noise impact will be minimal in adjacent residential areas and at resort facilities. The developer shall utilize ADF&G's Hunter Education Program coordinator in the design and development of the shooting facility to insure compatibility with public safety, to optimize public use values of the shooting facility, and to find the best location.

(a) Location. The resort developer shall conduct a site suitability analysis to find the best location. Site requirements include:

(i.) A natural hill as a backstop or an artificial backstop.

(ii.) Maintenance of at least a ½ mile buffer zone between the shooting activity and other resort facilities or private land for a sound buffer to reduce noise impacts. The buffer could be reduced to ¼ mile if there is an adequate means to muffle the sound such as a hill located between the range and other facilities.

(b) Noise. Measures will be taken to minimize noise impacts on others. Covered shooting points with sound baffles shall be used for a shooting range where appropriate. This will help reduce noise at the discharge point. With trap and skeet shooting, where covered points are not possible, maintenance of vegetative screening will help absorb sound.

If, in the future, DNR adopts decibel regulations or the Matanuska-Susitna Borough passes an ordinance on noise regulation, they will supercede this guideline.

(c) Alignment Direction. The activity should be aligned away from any facilities, trails, or ski activities because the range of shotguns is about 300 to 500 yards and rifle bullets can travel for several miles.

(d) Any outdoor shooting activity should be located where it can be incorporated into a biathlon course.

(e) Public Safety and Education.

(i.) A range control facility with full view of the shooting facility should be included in the design. The shooting range will be staffed by a person responsible for monitoring shooting activities.

(ii.) The developer shall provide a user's guide which outlines safety procedures. There shall be a procedure to check in users and inform them of the rules before allowing users to proceed to the range.

(iii.) The developer should consider including a facility for an instructional classroom on hunter education as a public service to the community.

(6) Horse Facilities. Horse facilities may include the necessary structures to support this activity such as a barn and corral. Feed for horses should primarily be obtained off premises. Horse facilities should be located where there will be uninterrupted access from stable to trail, located where streams will not be contaminated, and be compatible with other proposed trail and wildlife use of the area. The animals should be controlled for public safety.

(7) Sledding. Consider adding a sledding hill near the resort housing area.

(8) Downhill Ski Lifts and Trails. Backcountry access should be provided from the lifts both winter and summer.

(9) Golf Course. The golf course should be designed to leave stands of trees between fairways to serve as wind and visual buffers. The alignment of fairways, in addition to serving technical requirements of a high quality golf experience, should be located so as to optimize views of surrounding mountain scenery from resort dwellings and other nearby facilities. Consider designing the golf course with winter sports use in mind; e.g., cross-country ski lessons, sledding, ice skating. A general guideline for size of golf courses is up to 90 acres for a 9-hole course or up to 180 acres for an 18-hole course. The golf course should be designed to enhance its compatibility with moose. The golf course should not be fenced.

(10) Wildlife Viewing. Wildlife viewing should be considered as a resort activity. To maximize viewing opportunities, the resort project should be designed with viewing as a goal. ADF&G should develop a wildlife viewing plan in consultation with DOPOR. The developer should consult with the agencies in planning and implementation of wildlife viewing activities. Some initial recommendations based on limited available fish and wildlife data include:

(a) Moose Viewing. Consider establishing an enhanced moose winter range and wildlife viewing areas in the southwest portion of Subunit B. If this is not feasible or adequate, off-site locations may need to be considered, including the Matanuska Valley Moose Range.

(b) Salmon Viewing. There is potential for development of a salmon spawning viewing area near the mouth of Fishhook Creek.

(c) Landscape for Wildlife. When revegetating and landscaping, consider plant materials that will be beneficial to local wildlife species. Trees and shrubs should be planted in groves around base facilities and ponds to attract birds. Natural areas can be specifically designed to attract small mammals and birds. However, deciduous trees and shrubs known to be attractive to moose should be avoided as they will be browsed by moose and will attract moose which may create a public safety problem; this includes birch, aspen, poplar, and mountain ash.

(d) Visitor Information. Provide visitors with information on wildlife that occur in the area and guidelines for human compatibility with the wild animals.

(f) Fish and Wildlife Guidelines. Refer to other fish and wildlife habitat guidelines in chapter 3 and in this subunit.

(11) Public Information Station. The developer should consider inclusion of a contact station for DNR to provide information about public lands to visitors.

o. Helicopter operations

Helicopter operations are allowed within the four-season resort lease in Subunit B. In Subunit A, helicopter operations are allowed only for emergencies, construction, and maintenance. Before helicopter operations (other than those necessary for emergencies, construction, or maintenance), or a heliport that may be used for other types of operations will be approved in Subunit B, measures to address and minimize noise and other impacts must be developed. Examples of such measures are location, buffers, and limiting operations. The lessee must complete a helicopter operations plan that explains what measures will be taken to minimize these impacts. This helicopter operations plan must be approved by DNR before helicopter operations for commercial recreation purposes are allowed within the lower elevations of the lease.

5. ENGINEERING GEOLOGY

a. Slope Stability

(1.) Slope Stability Analysis. Perform a slope-stability analysis wherever permanent structures will be located on till slopes to ensure that the slope after construction will have a safety factor appropriate for the type of structure.